

### **REMARKS/ARGUMENTS**

The Office Action of July 23, 2008, has been carefully reviewed. Claims 14 and 33 are amended herein. Claims 2-19, 21-23, and 25-37 are presently pending, with claims 16, 17, 18, 19, 21, 22, 34-37 being the independent claims. Reconsideration is respectfully requested.

#### ***Allowable Subject Matter***

The Examiner is thanked for the indication of allowable subject matter. At present, however, Applicants are not amending the claims to include the additional limitations presented in the Examiner's Statement of Reasons for the Indication of Allowable Subject Matter, to provide the Examiner the opportunity to consider the rationales presented herein.

#### ***Drawing Objections***

The drawings are objected to under 37 CFR § 1.83(a) for not showing the features of method Claim 17. This objection is respectfully traversed.

Claim 17 recites: transmitting a request for a rate if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at the rate requested; receiving a rate assignment responsive to the request for the rate, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration; and transmitting data, the transmission responsive to the rate assignment, wherein the data is transmitted for the scheduled duration at the scheduled rate. These features are shown at least in Figure 4. For example, element 408 represents a rate request being transmitted from a mobile station 404 to a base station controller (scheduler) 402. In response to the request for a rate, the mobile station 404 receives rate assignment 418. Subsequently, the mobile station 404 transmits as shown by the arrow labeled "transmission." Because the features of Claim 17 are believed to be present in the drawings, the Examiner is respectfully requested to reconsider and withdraw this objection.

#### ***Claim Rejections – 35 USC § 112***

Claims 16, 18, 21, 23, 25-34, and 36 are rejected under 35 USC § 112, first paragraph, as not being enabled. Specifically, the Office Action states that the specification does not provide enablement for "the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration; . . . wherein the scheduled duration is less than or equal to

a scheduling period, the scheduling period being an interval of time after transmission of the rate assignment.”

A similar rejection under 35 USC § 112, first paragraph, is made against claims 2-15, and 17, and 19, 22, 35 and 37 in view of the recitation of “the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration . . . .” The Examiner is respectfully requested to reconsider and withdraw these rejections in view of the following.

As shown in Figure 4, ESCAMM (Enhanced Supplemental Channel Assignment Mini Message) 416 occurs after scheduling period 414. As noted at paragraph [0059], for instance, an ESCAMM is transmitted from a base station (and/or base station controller, as shown in Figure 4) with a rate assignment for a specified duration. As noted in paragraph [0075], the scheduler at the base transceiver station or the base station controller makes scheduling decisions.

The scheduler wakes up every scheduling period (SCH\_PRD) and sends scheduling grants for the next scheduling period. *Id.* As noted in paragraph [0077], the base station controller (scheduler) 402, after making a scheduling decision, sends an ESCAMM 416 (comprising a rate assignment for a specified duration) to a respective mobile station (MS). This process is further described in paragraphs [0079] through [0081], where the scheduler operates once every scheduling period to provide both scheduled rate transmissions and scheduled rate durations.

Thus, the ESCAMM (in one example) comprises a rate assignment that indicates both a scheduled duration and a scheduled rate applicable for the scheduled duration. Further, as discussed in an example provided in paragraph [0082] and as shown in Figure 4, the scheduled duration (SCH\_DUR) 426 is equal to or less than a scheduling period (SCH\_PRD) 424.

#### Scheduling Periods 414 and 508

The Examiner states at pages 3 and 5 of the Office Action that because the scheduling period 414 of paragraph [0077] and the scheduling duration period SCH\_PRD 508 of paragraph [0084] may or may not be the same thing, that they are thus non-enabled. This rejection is respectfully traversed as follows.

The scheduling period recited in the claims is shown in Figure 4 as element 414. The scheduling period is also shown in Figure 5 as element 508. Figure 4 depicts the scheduling period in relation to both of rate request 408 and rate assignment 418 as these are transmitted

between base station 402 and mobile station 404. Figure 5 depicts the scheduling period in relation to four minimum scheduling durations 510.

Applicants respectfully assert that the specification is clear and enabling to one of skill in the art, in that the skilled artisan would understand what the above scheduling periods are and how they relate to other aspects of the invention. Because of the clear description in the specification and from the plain language of the claims, the Examiner is respectfully requested to withdraw these rejections.

Allegation that the Specification Fails to Provide a Rate Assignment and That the Rate Assignment and Scheduled Rate are Non-Enabled

The Examiner states at pages 3 and 5 of the Office Action that specification does not “define a rate assignment indicating a scheduled duration and a scheduled rate,” and that “it is unclear which of the scheduling timing, scheduled rate transmissions and scheduled rate durations corresponds to the schedule duration and the scheduled rate recited in the claim. Specifically, para. [0081] discloses a ratio  $SCH\_PRD/MIN\_SCH\_DUR = n$  and  $SCH\_PRD$  is an integer multiple of  $MIN\_SCH\_DUR$ . Examiner notes  $n$  is the integer multiple. This ratio, not the integer multiple, or the inverse  $1/n$  can be the scheduled rate. However, such an inverse is not discussed in the Specification. Therefore, it is non-enabling what are rate assignment and scheduled rate in the claim” These rejections are respectfully traversed as follows.

As an initial point, Applicants respectfully assert that the Office Action, as cited immediately above, appears to confuse periods of time (for example, scheduling period 508 and minimum scheduled duration 510 shown in Figure 5) with a data rate. The rate at which the scheduling period 510 can be divided by the minimum scheduled duration 510 should not be confused with a scheduled data rate.

Consider that multiple scheduling periods 508 are shown along horizontal axis 502 in Figure 5. Within each scheduling period 508 is at least one minimum scheduled duration 510. As shown in Figure 5, four minimum scheduled durations 510 are shown as equaling one scheduling period 508. In contrast, examples of data rates are disclosed in paragraph [0061], wherein various data rates are transmitted from the mobile station, for example, 9600 bits-per-second or 1500 bits-per-second.

In noting that various data rates are possible, paragraphs [0057], [0058] and [0059] provide yet further guidance by disclosing that the mobile station receives its grant information within an ESCAMM (enhanced supplemental channel assignment mini message) such that a "rate assignment for [a] specified scheduling duration" is provided (emphasis added).

Therefore, as noted above, the ESCAMM comprises a rate assignment that indicates both a scheduled duration and a scheduled data rate applicable for the scheduled duration. The ESCAMM is transmitted from a base station (and/or base station controller, as described in paragraph [0059]) with a rate assignment for a specified duration. The scheduled duration (SCH\_DUR) is equal to or less than a scheduling period (SCH\_PRD), as described in paragraphs [0075], [0082] and [0084].

Applicants respectfully assert that, in view of the previous description, the specification is clear and enabling to one of skill in the art, in that the skilled artisan would understand that the ESCAMM comprises a rate assignment that indicates both a scheduled duration, and a scheduled data rate for the scheduled duration. Further, it would be clear to one of skill in the art how the ESCAMM relates to other aspects of the invention including the data rate and the scheduled duration. Because of the clear description in the specification and from the plain language of the claims, the Examiner is respectfully requested to withdraw these rejections.

#### Allegation that the Scheduling Period is Non-Enabled

The Examiner states at pages 4 and 5 of the Office Action that the scheduling period is non-enabled and that the scheduling period cannot be MIN\_SCH\_DUR, in that claim limitations include the recitation of "the scheduling period being an interval of time after transmission of the rate assignment." These rejections are respectfully traversed as follows.

The Examiner concedes (at page 3, lines 8-10 of the Office Action) that Figure 4 illustrates four scheduling periods 414. After the first scheduling period, a rate assignment Rassign(n) 418 is transmitted from base station 402 to the mobile station 404. Following the scheduling period during which the rate assignment 418 is transmitted is the third scheduling period. The third scheduling period is labeled as scheduling period 424. As clearly shown in Figure 4, scheduling period 424 is an interval of time after transmission of rate assignment 418.

The Examiner also states that the scheduling period cannot be MIN\_SCH\_DUR. However, as noted in paragraph [0075], "the scheduled duration of an MS in a scheduling period

is variable. MIN\_SCH\_DUR is the minimum scheduled duration of an MS and the scheduled duration of an MS is in steps of MIN\_SCH\_DUR not to exceed the SCH\_PRD.” A similar statement is made in paragraph [0084]. Accordingly, the scheduled duration may be less than the scheduling period, or may equal the scheduling period but may not exceed the scheduling period, as further supported by paragraph [0082], wherein it states that “[g]enerally, SCH\_DUR ≤ SCH\_PRD.”

Applicants respectfully assert that, in view of the previous description, the specification is clear and enabling to one of skill in the art, in that the skilled artisan would understand that the scheduling period can be equal to the scheduled duration, and how the features relate to other aspects of the invention. Because of the clear description in the specification and from the plain language of the claims, the Examiner is respectfully requested to withdraw these rejections.

#### Conclusion as to 35 USC § 112, First Paragraph Rejections

It is clear in view of the previous rationales that the noted claim terms are enabled by both the plain claim language and the description in the specification.. It is therefore respectfully requested that the § 112, first paragraph, rejections be withdrawn for claims 16, 18, 21, 23, 25-34, and 36, 2-15 and 17, and 19, 22, 35 and 37.

#### Claim Rejections – 35 USC § 102

Claim 17 is rejected under 35 USC § 102 as being anticipated by USP 6,807,426 (Pankaj). This rejection is respectfully traversed.

A single prior art reference anticipates a patent claim only if it expressly or inherently describes each and every limitation set forth in the patent claim. *See* MPEP § 2131; *see also* Trintec Industries, Inc. v. Top-U.S.A. Corp., 295 F.3d 1292, 63 USPQ2d 1597 (Fed. Cir. 2002); and Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). In fact, the identical invention must be shown in as complete detail as is contained in the claim. Richardson v. Suzuki Motor Co., 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Claim 17 includes the limitations of transmitting a request for a rate if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at the rate requested. At least these features are neither disclosed nor suggested by Pankaj.

Pankaj discloses an access network 122 receiving a data request from an access terminal 126. *See* Column 5, lines 28-35 and Figure 1B. The data request specifies the data rate at which the data is to be sent, the length of the data packet to be transmitted, and the sector from which the data is to be sent. *Id.* The access terminal 126 determines the data rate based on the quality of the channel between the access network 122 and the access terminal 126, for instance, through use of a carrier-to-interference ratio. *Id.* "In operation, the AT [access terminal] 126 continuously monitors the quality of the Channel to calculate a data rate at which the AT 126 is able to receive a next data packet transmission. The AT 126 then generates a DRC [data rate control] value; the DRC value is transmitted to the AN [access network] 122 to request a data transmission." Column 5, lines 56-63.

Because transmitting a request for a rate based on a carrier-to-interference ratio cannot reasonably be said to be "transmitting a request for a rate if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at the rate requested," Pankaj is deficient. Claim 17 is therefore seen to be allowable, as are dependent claims 2-15 by virtue of their direct or ultimate dependence upon claim 17.

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Amendment dated October 10, 2008  
Reply to Office Action of July 23, 2008

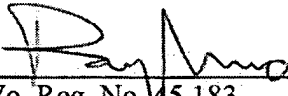
### CONCLUSION

Applicants submit, as each objection and rejection of the 23 July 2008 Office Action has been addressed, that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

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